



ASSIST-ME research conference

Assess Inquiry in Science, Technology and Mathematics Education

Copenhagen 3 November 2016



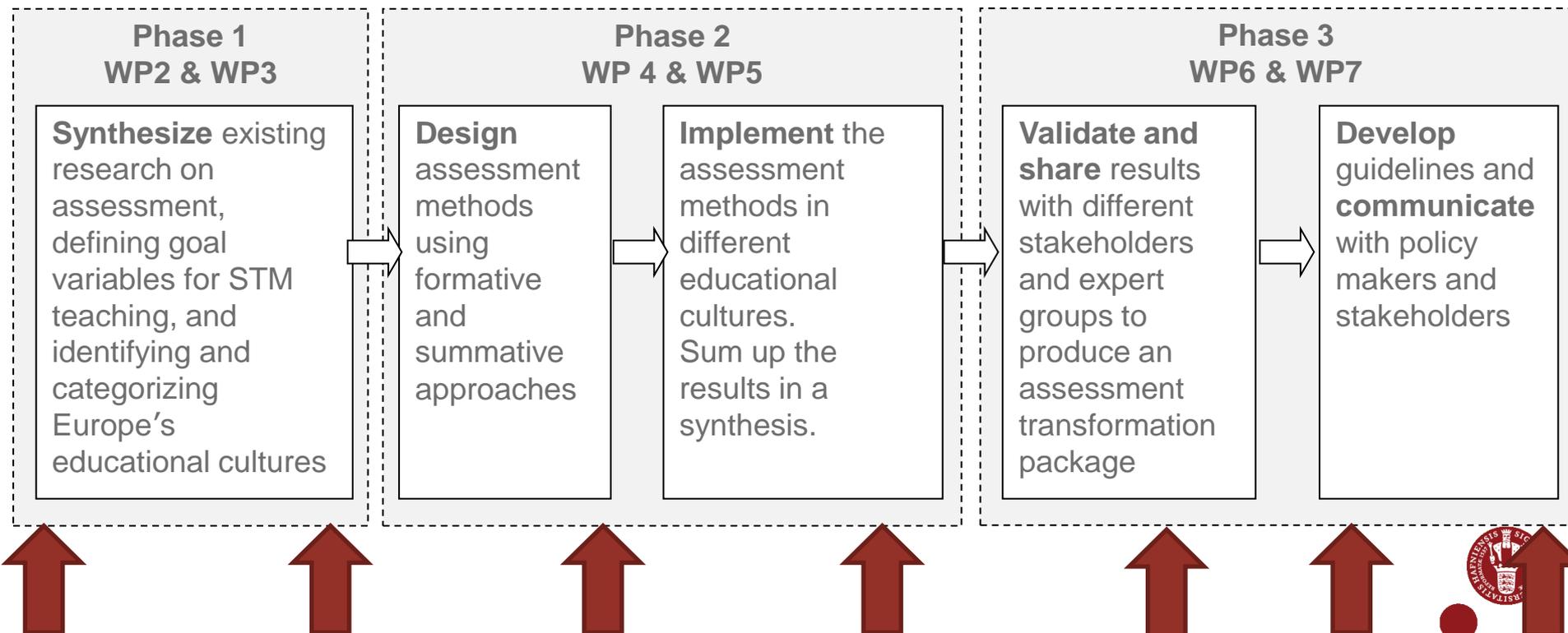
Jens Dolin
Coordinator

ASSISTME

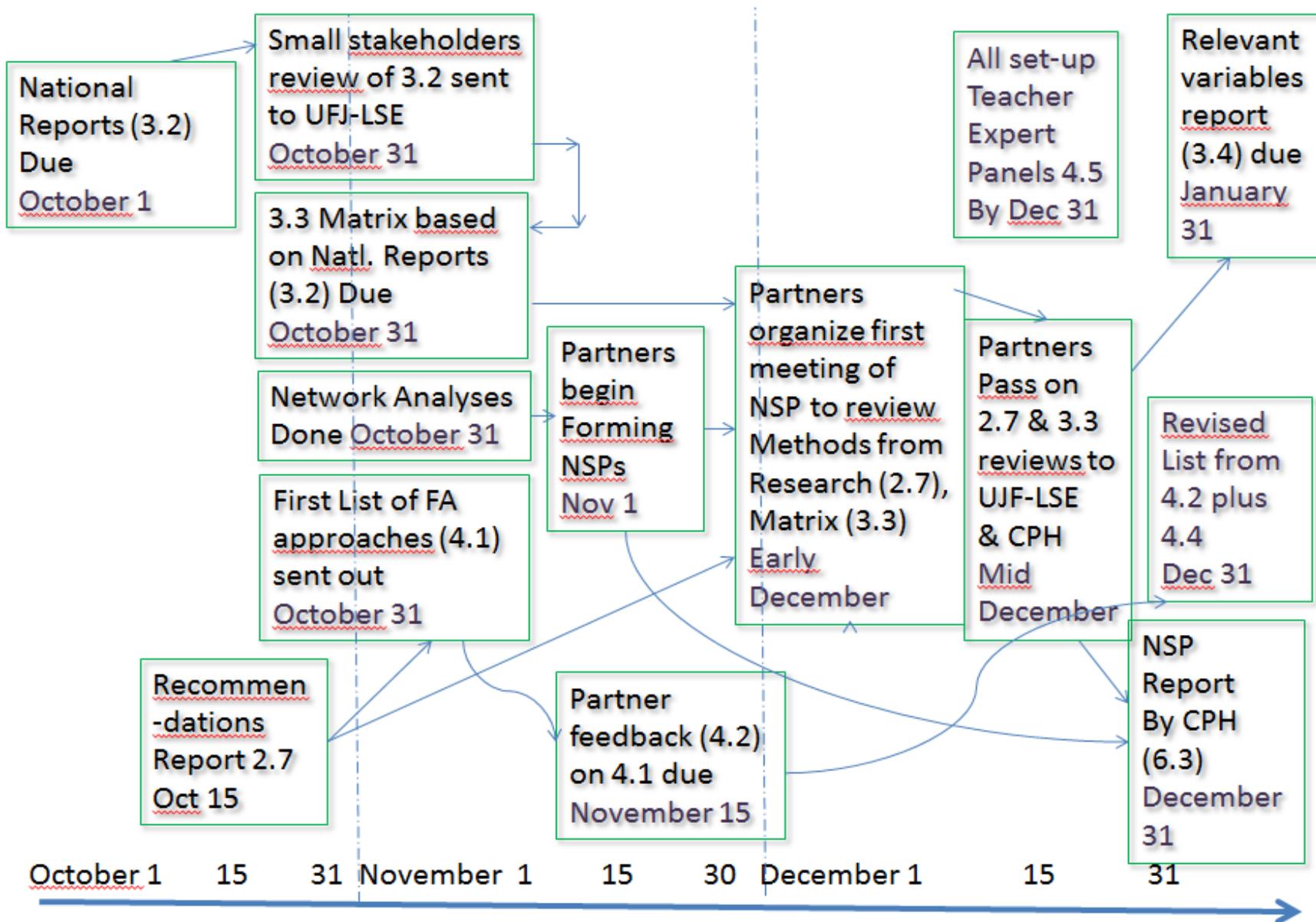
<http://assistme.ku.dk/>



The overall aim of ASSIST-ME is to **provide a research base** on effective uptake of formative and summative assessment for inquiry-based, competence oriented Science, Technology and Mathematics (STM) education in primary and secondary education in different educational contexts in Europe and to use this research base to **give policy makers and other stakeholders guidelines** for ensuring that assessment enhances learning in STM education.



Revised end of Phase 1



The research questions

1. What are the **main challenges related to the uptake of formative assessment** in the daily practices in science, technology and mathematics in primary and secondary schools in different European educational systems?
2. What **changes are needed in summative assessment practices**?
3. How can formative and summative assessment methods be **used together** to promote learning in inquiry-based STM teaching?
4. How can research-based strategies for the use of formative/summative assessment be **adapted to various European educational traditions** to ensure their use and avoid hindrances?



Four assessment methods and six competences

In ASSIST-ME we have chosen four assessment methods:

- Questioning and other interactions on-the-fly
 - Marking (Grading and Feedback)
 - Student Peer- and Self-Assessment
 - Structured Assessment Dialogue
- to be used *formatively* and *summatively*

and six competences:

- Empirical investigations in **science**
- Problem solving in **mathematics**
- Design in **technology**
- Argumentation
- Modeling
- Innovation

We see the last three competences as generic, in the sense that they can be acquired in all three subjects.



The deliverables

We have until now produced 44 deliverables

We have produced several journal articles

We have presented at numerous conferences and seminars.

The final Assessment Transformation Package aimed at teachers and stakeholders is integrated in the website: <http://assistme.ku.dk/>

The Assessment Transformation Package aimed at researchers will be a book:

Transforming assessment – through an interplay between practice, research and policy. Springer August 2017.

11 chapters covering the project findings



Agenda

Robin Millar: 'Using assessment to change teachers' practices and views'

Research methods – hands on.

Lunch

Short presentations by partners of book chapter content/problems –
table discussions

External researchers panel discussion grounded in day's proceedings
and including new research directions

